



Call for Proposals March 30, 2009

McDonnell Academy Global Energy and Environment Partnership (MAGEEP)

www.mageep.wustl.edu

Following a very successful first round of collaborative projects with our McDonnell Academy Partner Universities, and based on the First International Symposium (May 2007) and recently concluded Second International Symposium on Energy and Environment (December 2008), we will have another round of funding to support “seed projects” for our faculty who wish to pursue with partners in the McDonnell Academy. These funds are to promote international collaborative activities with faculty and students at partner institutions of the Academy (<http://mcdonnell.wustl.edu>).

Please note that a round of funding under the Consortium for Clean Coal Utilization for up to \$ 1 Million per year is currently in the review process (including partnership with MAGEEP Universities). We are now calling for additional proposals from tenured and tenure-track faculty at Washington University in St. Louis in broader interest areas of Energy, Environment and Sustainability. Imaginative and innovative proposals are sought under the following general guidelines.

MAGEEP Proposal Guidelines

All Proposals Must:

1. Include concrete information about the involvement of faculty or students from at least one McDonnell Academy partner institution in addition to Washington University. For contact persons at each partner institution, consult <http://www.mageep.wustl.edu/Board.aspx> & list of faculty by topical area at the Partner Universities.
2. Show how the project would be sustained and go beyond activities carried out after seed funding from MAGEEP is used.
3. Identify products to be presented at the September / October 2010 3rd International Energy and Environmental Symposium to be held in St. Louis (coincident with the opening of Brauer Hall). These may be in the form of preliminary reports of findings, joint peer reviewed papers, conference presentations, joint proposals for extended funding, and so forth.
4. Identify at least one Washington University and partner University faculty member and/or students who will attend the Symposium in St. Louis; and present an extended abstract as a progress report. In addition, faculty PIs and their students are strongly encouraged to attend the ICARES/MAGEEP monthly colloquium at Washington University throughout the year (first Wednesday of the month, 4 pm).

Additional Preference Will Be Given to Proposals that:

1. Are fundamentally interdisciplinary, involving representatives of more than one discipline or department/school at Washington University (e.g., engineers working with economists and policy analysts in a joint project to address a problem in energy or environment)
2. Involve representatives of two or more institutional partners of the McDonnell Academy. Multiple partner collaborations are consistent with the Academy’s goal of promoting more effective global efforts in the study of energy and environmental issues.
3. Show evidence of shared funding from one or more partner institutions
4. Include students as well as faculty in the funded activities

Proposals may be in the range of \$ 5,000 to \$40,000 (maximum).

Proposals may address basic categories of funded activity that grew out of the discussions at the McDonnell Academy International Symposium on Energy and Environment but are not limited to these categories. Combinations of these categories are encouraged. The categories identified during the Symposium include:

I. Educational activities

1. Co-development of content/modules for courses on energy and environment (e.g., support for colleagues from partner institutions, travel to and from institutions)
 - a. Aerosols and air quality
 - b. Energy (science/technology/policy)
 - c. General environmental education
 - d. Environmental policy
 - e. University campuses as living energy and environment laboratories
 - f. Other innovative ideas

The proposal description should include a description as to how the course modules or educational development will be demonstrated at the St. Louis meeting in conjunction with the partner university collaborators.

2. Joint multi-university Workshops addressing topical Energy and Environmental issues.
3. Other innovative ideas in collaborative education in energy, environmental and sustainability areas

II. Research activities

1. Social, economic, and political dimensions of energy and environment
2. Adverse environmental impacts on human health
3. Environmental impact on social and economic settings, including livelihood of the poor
4. Water supply and treatment for small communities
5. Technologies for sustainable development in rural communities
6. Carbon dioxide related studies: novel combustion system, sequestration (chemical and biological); integrated approaches for CO₂ capture and conversion.
7. Biofuels & Bioenergy
8. Combustion (biofuels and coal) aerosols: characterization and control
9. Air/water quality and environmental health (also the spread of infectious diseases)
10. Photo-activated processes and photo-voltaics for energy and environmental technologies
11. Political and economic viability of energy usage and the environment
12. Public support for conservation and renewables
13. Sustaining natural communities and conservation
14. Sustaining ecological processes
15. Dynamic, systematic evaluation of energy usage and environmental policy
16. Architectural design for green buildings
17. University best practices for reducing environmental footprints
18. Other investigator initiated ideas

We encourage the inclusion of doctoral students in the projects. A project could budget for Washington University doctoral student travel to partner universities (to spend up to 6 months at a partner institution). Hosting partner university doctoral students at WUS_{TL} laboratories is also encouraged and may be included in the budget. Short visits by partner university faculty to WUS_{TL} to interact with faculty and student groups are also encouraged (funding can be included in proposal budget).

LOGISTICS OF SUBMISSION

- 1) The proposal project description should not exceed 5 pages (standard 8.5 x 11; approximately 2500 words). This should address the items outlined above.
- 2) If funding was received from a previous MAGEEP or ICARES proposal, please include an additional report, not to exceed 2 pages, of accomplishments from that funding. Specifically, identify efforts made to sustain collaborative activities.
- 3) Curriculum Vitae of all participating faculty (WUSTL and partner university CVs should be appended). The CVs should not exceed 2 pages each. If names of participating doctoral students are known, they should be identified.
- 4) Budgets should include an itemized list of monies to be spent along with a justification. The following elements should be included: Travel expenses for at least one faculty member from the partner Institution to attend the September / October 2010 Symposium in St. Louis should be clearly identified and listed.
- 5) No funds can be used for faculty salary. No overhead or tuition for students can be charged.

PROPOSAL DEADLINE:

April 30, 2009

(sent electronically to Prof. James V. Wertsch: jwertsch@wustl.edu with copy to kwilliam@artsci.wustl.edu)

NOTIFICATION OF SELECTED PROPOSALS:

May 15, 2009

MAGEEP Coordinating and Proposal Review Committee:

James V. Wertsch, co-Chair of Coordinating Committee, Director of McDonnell Academy
Pratim Biswas, co-Chair, School of Engineering and Applied Sciences, Director, MAGEEP
Linda Cottler, School of Medicine
Bruce Lindsey, School of Architecture
Himadri Pakrasi, Arts and Sciences, School of Engineering and Applied Sciences
William Lowry, School of Arts and Sciences
Gautam Yadama, School of Social Work

For more information, contact James V. Wertsch (jwertsch@wustl.edu)